

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

## PCT

To:

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17 FEB 2005

APPLY TO APPLEYARD LEES

NOTIFICATION OF TRANSMITTAL OF  
THE INTERNATIONAL PRELIMINARY  
REPORT ON PATENTABILITY

(PCT Rule 71.1)

Date of mailing  
(day/month/year)

14.02.2005

Applicant's or agent's file reference  
DXM/GJY2973

### IMPORTANT NOTIFICATION

International application No.  
PCT/EP2004/003258

International filing date (day/month/year)  
26.03.2004

Priority date (day/month/year)  
26.03.2003

Applicant  
SIGMAKALON SERVICES B.V. et al

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary report on patentability and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.
4. **REMINDER**

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed inventions is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

Name and mailing address of the international preliminary examining authority:



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# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference DXM/GJY2973		<b>FOR FURTHER ACTION</b>		See Form PCT/PEA416
International application No. PCT/EP2004/003258		International filing date (day/month/year) 26.03.2004	Priority date (day/month/year) 26.03.2003	
International Patent Classification (IPC) or national classification and IPC C09D183/10				
Applicant SIGMAKALON SERVICES B.V. et al				
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 5 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> sent to the applicant and to the International Bureau a total of sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>				
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>				
Date of submission of the demand  20.10.2004		Date of completion of this report  14.02.2005		
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465		Authorized Officer  Kolitz, R  Telephone No. +49 89 2399-8481 		

**INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY**

10/550834  
JC09 Rec'd PCT/PTO 43 SEP 2005  
International application No.  
PCT/EP2004/003258

**Box No. I Basis of the report**

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language, which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
  - ☐ publication of the international application (under Rule 12.4)
  - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements\*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

**Description, Pages**

1-31 as originally filed

**Claims, Numbers**

1-45 as originally filed

**Drawings, Sheets**

1/1 as originally filed

- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages
  - ☐ the claims, Nos.
  - ☐ the drawings, sheets/figs
  - ☐ the sequence listing (*specify*):
  - ☐ any table(s) related to sequence listing (*specify*):
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages
  - ☐ the claims, Nos.
  - ☐ the drawings, sheets/figs
  - ☐ the sequence listing (*specify*):
  - ☐ any table(s) related to sequence listing (*specify*):

\* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY**

International application No.  
PCT/EP2004/003258

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**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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**1. Statement**

Novelty (N)	Yes: Claims	1-45
	No: Claims	
Inventive step (IS)	Yes: Claims	1-45
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-45
	No: Claims	

**2. Citations and explanations (Rule 70.7):**

**see separate sheet**

**Re item V:**

Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability, Article 33 (2) to (4) PCT; citations and explanations supporting such statement

D1: US2002156224

1. The present invention relates to a **process** for the preparation of polysilylesters comprising structural units of formula (I) as defined in present claim 1 by reacting a polyacid of formula (II) with a polyacyloxysilyl derivative of formula (III), see claims 1-36. [Present claim 36 refers to the examples and figures which is formally not allowable under Rule 6.2 (a) PCT and therefore it is regarded as if it had not been filed].

Present claims 37 and 44 relate to a **film or coating** comprising a polymer obtainable by such a process and present claim 39 and 41-44 to a **film or coating composition** comprising a polysilylester obtainable by such a process.

Present claims 38 and 40 relate to a **polysilylester** comprising the structural unit of formula (I) as defined in present claim 1.

Present claim 45 relates to an **implantable medical und /or veterinary device** having a coating or comprising a coating composition according to claims 39, 41 and 43.

2. The present application meets the requirements of Article 33 (2) PCT because the subject-matter of claims 1-43 is novel.  
None of the documents of the prior art discloses a **process** for the preparation of polysilylesters comprising a structural unit of formula (I) as defined in present claim 1 or a **film or coating** comprising a polymer(polysilylester) obtainable by such a process or a **film or coating composition** comprising it or the polysilylester as such as defined in present claims 37,44 / 39,41-44 / 38 and 40 or an **implantable medical und /or veterinary device** having a coating or comprising a coating composition comprising it as defined in claim 45.

The subject-matter of claims 1-45 is therefore novel.

3. The present application meets also the requirements of Article 33 (3) PCT because the subject-matter of claims 1-45 is inventive.

D1 is considered to represent the closest prior art since it discloses silylester copolymers. The silylester copolymers of D1 do not exhibit structural units of formula (I) as defined in present claim 1 and they are not produced by reacting a polyacid of formula (II) with a polyacyloxysilyl derivative of formula (III), see present claims 1-36.

The problem underlying the present application may be regarded as to provide a further silylester copolymer for metal free antifouling coatings and a process or the preparation thereof.

No indication is given in the prior art that the specific polysilylesters comprising structural units of formula (I) as defined in present claim 1 or coatings or coating compositions thereof, the specific polysilylesters being obtainable by reacting a polyacid of formula (II) with a polyacyloxysilyl derivative of formula (III), as defined in claims 1-45 can be used to solve this problem.

Therefore the presence of an inventive step can be acknowledged for the subject-matter of claims 1-45 vis-à-vis the documents of the search report.

4. The present application meets the requirements of Article 33 (4) PCT because the subject-matter of claims 1-45 is also industrially applicable.